

IN THE CLAIMS

This listing of the claim will replace all prior versions and listings of claim in the present application.

Listing of Claims

Claims 1-12 (canceled).

13. (previously presented) A method of switching IP (Internet Protocol) packets at a packet switching system, comprising the steps of:
- allocating a pair including an IP address and a port number in Transmission Control Protocol (TCP) or User Datagram Protocol (UDP) to a Virtual Channel Identifier (VCI); and
 - outputting IP packets whose headers have the IP address and the port number via a Virtual Connection (VC) corresponding to the VCI when the packet switching system receives the IP packets,
 - wherein if IP packet headers have a certain part identical with previously input IP packets, then the allocated VCI is the same as a VCI allocated to the previously input IP packets,
 - wherein if the certain part of the IP packet headers is different from the previously input IP packets, then the allocated VCI is an idle VCI,
 - wherein the VC is included in a Virtual Path (VP), and
 - wherein all IP packets are transmitted, not according to the VCI, but according to a Virtual Path Identifier (VPI) of the VP in an ATM network.

14. (previously presented) The method of switching IP packets according to claim 13, wherein the IP address is a pair of a source IP address and a destination IP address.

15. (previously presented) A method of switching IP (Internet Protocol) packets at a packet switching system, comprising the steps of:

- allocating a pair including an IP address and information for identifying an application to a Virtual Channel Identifier (VCI); and
- outputting IP packets whose headers have the IP address and the information via a Virtual Connection (VC) corresponding to the VCI when the packet switching system receives the IP packets,
- wherein if IP packet headers have a certain part identical with the previously input IP packets, then the allocated VCI is the same as a VCI allocated to the previously input IP packets,
- wherein if the certain part of the IP packet headers is different from the previously input IP packets, then the allocated VCI is an idle VCI,
- wherein the VC is included in a Virtual Path (VP), and
- wherein all IP packets are transmitted, not according to the VCI, but according to a Virtual Path Identifier (VPI) of the (VP) in an ATM network.

16. (previously presented) The method of switching IP packets according to claim 15, wherein the information is a port number in Transmission Control Protocol (TCP) or User Datagram Protocol (UDP).

17. (previously presented) The method of switching IP packets according to claim 16, wherein the IP address is a pair of source IP address and destination IP address.